

# MT-50000 SERIES

# MINNTRONIX

Wind Up the Best®

## General Purpose Inductors

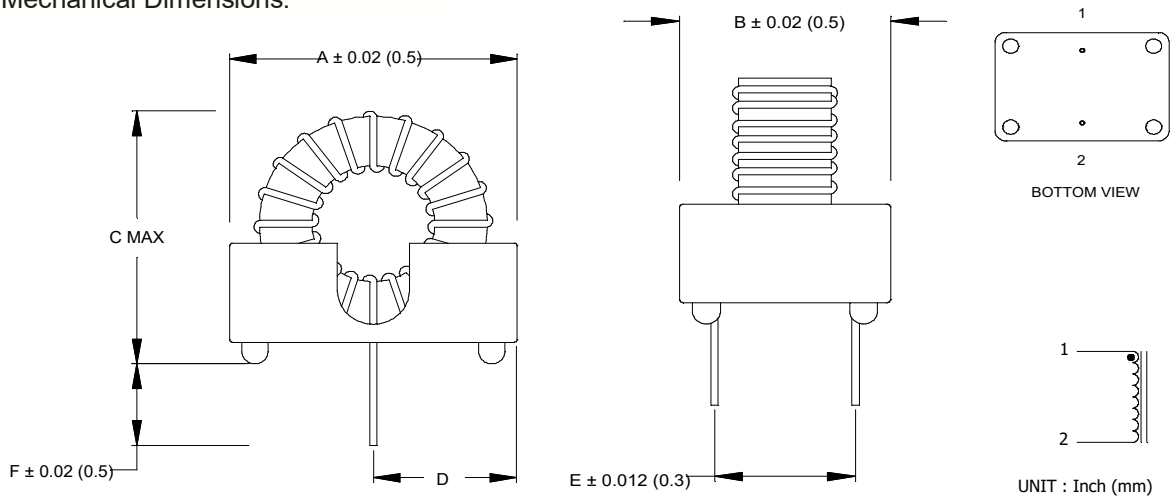


Phone: 1.605.884.0195  
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MT-50000 SERIES

- Mounting base assures assembly stability, holds pins securely in position
- Plastic material meets flammability requirements of UL94V-0
- PC board-automatic insertion applicable
- SMPS averaging 2nd ripple filter
- Single layer designs
- May be used as differential mode inductor in EMI filters
- Economical baseless version available

### Mechanical Dimensions:

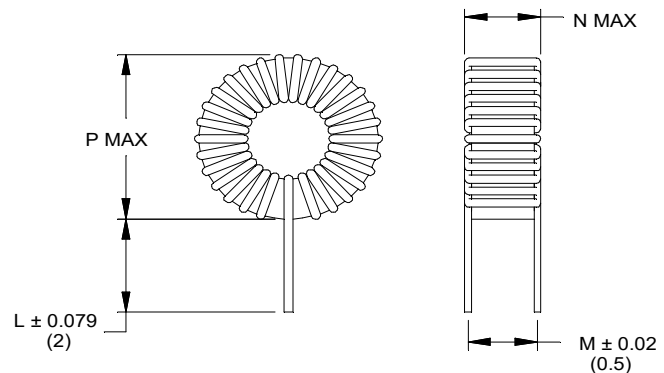


### With base

Package Style	A	B	C	D	E	F
T-KM44	0.58 (14.73)	0.34 (8.64)	0.65 (16.51)	0.29 (7.37)	0.22 (5.6)	0.13 (3.3)
T-KM50	0.65 (16.51)	0.45 (11.43)	0.7 (17.78)	0.325 (8.26)	0.3 (7.62)	0.13 (3.3)
T-KM68	0.83 (21.08)	0.45 (11.43)	0.95 (24.13)	0.415 (10.54)	0.3 (7.62)	0.13 (3.3)
T-KM80	0.97 (24.64)	0.602 (15.3)	1.1 (27.94)	0.475 (12.07)	0.45 (11.44)	0.13 (3.3)
T-KM106	1.3 (33.02)	0.7 (17.78)	1.4 (35.56)	0.625 (15.88)	0.5 (12.7)	0.13 (3.3)

### Baseless design

Coil Size	P	N	L	M
A	0.55 (13.97)	0.25 (6.35)	0.375 (9.53)	0.18 (4.57)
B	0.70 (17.78)	0.38 (9.65)	0.375 (9.53)	0.28 (7.11)
C	0.85 (21.59)	0.41 (10.41)	0.375 (9.53)	0.28 (7.11)
D	1.05 (26.67)	0.55 (13.97)	0.375 (9.53)	0.4 (10.16)
E	1.40 (35.56)	0.7 (17.78)	0.375 (9.53)	0.5 (12.7)
F	1.65 (41.91)	0.7 (17.78)	0.375 (9.53)	0.5 (12.7)
G	0.85 (21.59)	0.33 (8.38)	0.875 (22.23)	0.33 (8.38)
H	0.64 (16.26)	0.28 (7.11)	0.875 (22.23)	0.28 (7.11)



UNIT : Inch (mm)

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

# MT-50000 SERIES

## General Purpose Inductors

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MT-50000 SERIES



### Electrical Specifications at 25°C

Reference Operating Values					Design Control Values					
Part Number	Inductance Typical (uH)	IDC (Amps)	ETop (V-us)	Min Energy Storage (uJ)	Inductance No DC (uH±20%)	20 KHz Test mV No DC	DCR (mΩ max)	Coil Size Code	Mount Package	Lead Dia Inch (mm)
MT-50001	20	2.0	52	40	32.8	33	60	H	—	0.02 (0.5)
MT-50002	25	2.6	30	85	20.7	22	43	A	T-KM44	0.02 (0.5)
MT-50003	50	2.6	50	169	45.7	45	71	B	T-KM50	0.02 (0.5)
MT-50004	100	2.6	90	338	94.1	90	100	C	T-KM68	0.02 (0.5)
MT-50005	35	2.6	55	118	28.4	36	37	B	T-KM50	0.025 (0.635)
MT-50006	70	3.0	85	315	61.0	73	52	C	T-KM68	0.025 (0.635)
MT-50007	145	3.0	140	653	141.8	140	87	D	T-KM80	0.025 (0.635)
MT-50008	285	3.0	300	1283	264.1	340	140	E	T-KM106	0.025 (0.635)
MT-50009	450	3.0	425	2025	436.3	500	200	F	—	0.025 (0.635)
MT-50010	100	3.6	130	648	90.7	110	45	D	T-KM80	0.031 (0.8)
MT-50011	165	4.0	240	1320	152.0	260	70	E	T-KM106	0.031 (0.8)
MT-50012	270	4.0	350	2160	263.9	400	100	F	—	0.031 (0.8)
MT-50013	40	4.0	70	320	37.9	57	27	C	T-KM68	0.031 (0.8)
MT-50014	22	5.0	44	275	20.3	37	20	G	—	0.031 (0.8)
MT-50015	100	5.0	200	1250	90.7	180	34	E	T-KM106	0.039 (1.0)
MT-50016	170	5.0	300	2125	159.7	310	50	F	—	0.039 (1.0)
MT-50017	55	5.0	100	688	54.9	88	23	D	T-KM80	0.039 (1.0)
MT-50018	95	7.0	225	2328	96.0	200	25	F	—	0.051 (1.3)
MT-50019	55	7.0	150	1348	49.1	100	17	E	T-KM106	0.051 (1.3)
MT-50020	55	10.0	175	2750	55.9	120	13	F	—	0.063 (1.6)

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

# MT-51000 SERIES

## Inductors

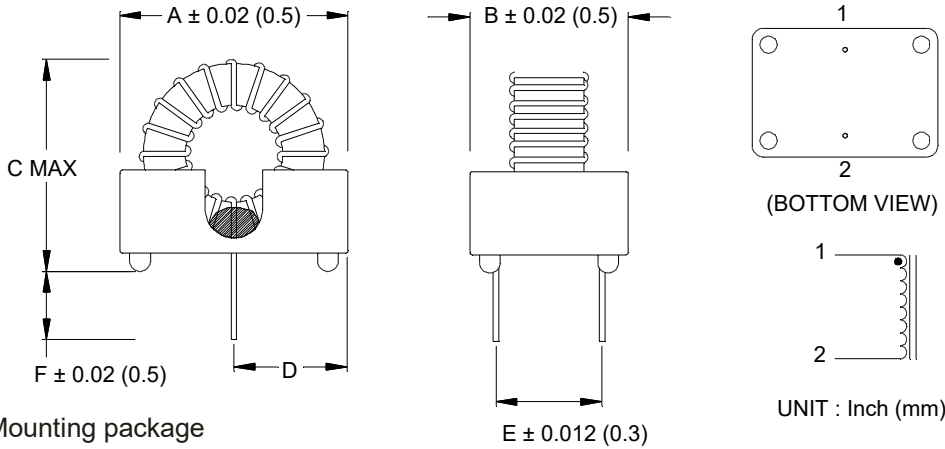
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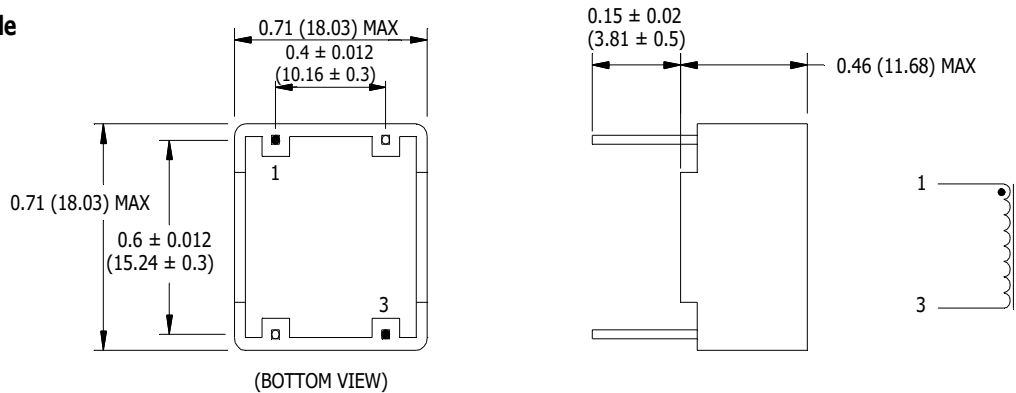
### Mechanical Dimensions:



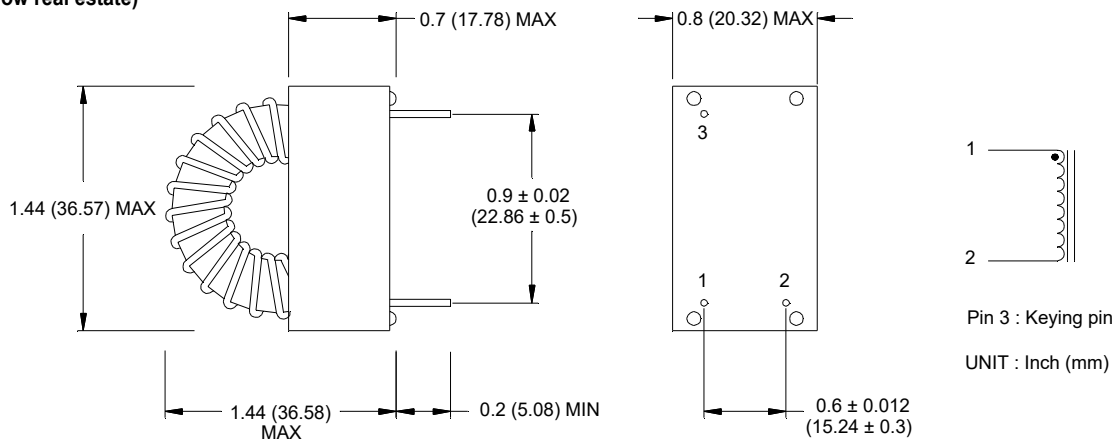
### Mounting package

Package Style	A	B	C	D	E	F
T-KM50	0.65 (16.51)	0.45 (11.43)	0.70 (17.79)	0.325 (8.26)	0.3 (7.62)	0.13 (3.3)
T-KM68	0.83 (21.08)	0.45 (11.43)	0.95 (24.13)	0.415 (10.54)	0.3 (7.62)	0.13 (3.3)
T-KM80	0.97 (24.64)	0.602 (15.3)	1.1 (27.94)	0.475 (12.07)	0.45 (11.44)	0.13 (3.3)
T-KM106	1.3 (33.02)	0.7 (17.78)	1.4 (35.56)	0.625 (15.88)	0.5 (12.7)	0.13 (3.3)

### Low Profile



### High Profile (low real estate)



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# MT-51000 SERIES

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## Inductors



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- Base material meets flammability requirements of UL 94V-0



MT-51000 SERIES

Electrical specifications at 25°C

Part Number	Reference Operating Values			Design Control Values			
	Inductance Typical (uH)	IDC (Amps)	ETop (V·us)	Inductance No DC (uH±20%)	DCR (Ω max)	Package Style	Lead Dia Inch (mm)
MT-51001	47	3.0	90	38	0.05	T-KM50	0.025 (0.635)
MT-51002	150	2.0	90	130	0.10	T-KM80	0.025 (0.635)
MT-51003	220	1.4	90	230	0.38	Low profile	0.025 (0.635) SQ
MT-51004	220	1.4	90	176	0.14	T-KM68	0.02 (0.5)
MT-51005	330	0.9	90	302	0.74	Low profile	0.025 (0.635) SQ
MT-51006	330	0.9	90	267	0.18	T-KM68	0.02 (0.5)
MT-51007	470	0.64	90	426	0.16	T-KM80	0.025 (0.635)
MT-51008	680	0.85	90	657	1.25	Low profile	0.025 (0.635) SQ
MT-51009	150	3.0	200	136	0.10	T-KM80	0.025 (0.635)
MT-51010	220	3.0	200	167	0.07	T-KM106	0.031 (0.8)
MT-51011	330	3.0	200	292	0.15	T-KM106	0.025 (0.635)
MT-51012	470	2.0	200	369	0.17	T-KM106	0.025 (0.635)
MT-51013	680	1.3	200	562	0.20	T-KM106	0.025 (0.635)
MT-51014	1000	0.95	200	762	0.24	T-KM106	0.025 (0.635)
MT-51015	1500	0.62	200	1150	1.00	High profile	0.031 (0.8)
MT-51016	2200	0.42	200	1730	1.80	High profile	0.031 (0.8)
MT-51017	68	3.0	90	55	0.02	T-KM80	0.039 (1)
MT-51018	100	3.0	90	91	0.04	T-KM80	0.031 (0.8)

Inductance Test at 20 KHz, 10mV

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

# MT-51900 SERIES

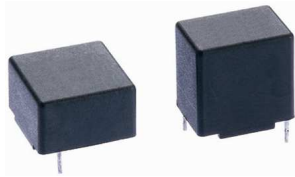
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## Standard Low Power Inductors



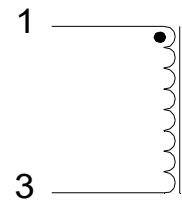
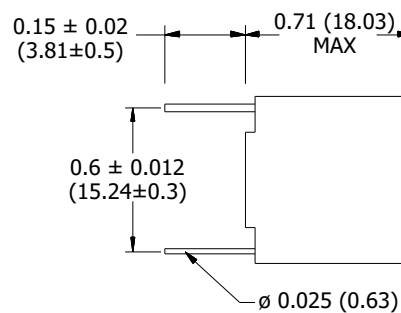
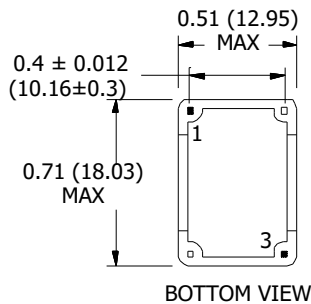
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- Designed for general purpose use, switchmode power converters and ripple filters
- High inductance stability with variable volt•seconds and load currents
- Compact packages with vertical and low profile options available

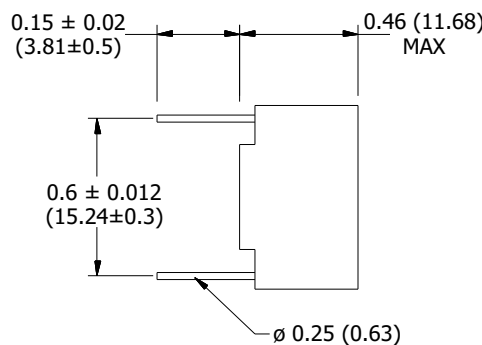
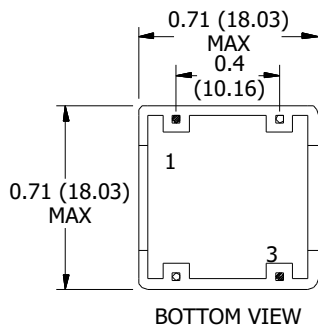
Mechanical Dimensions:

### VERTICAL



UNIT : Inch (mm)

### LOW PROFILE



Electrical Specifications at 25°C

Reference Operating Values					Design Control Values			
Low Profile Part No	Vertical Part No	Inductance Typical (uH)	IDC (Amps)	Max ETop (V•us)	Inductance No DC (uH±20%)	200 KHz Test Volts No DC	DCR (Ω max)	Min Energy Storage (uJ)
MT-51901	MT-51902	150	1.7	80	145	0.11	0.42	215
MT-51903	MT-51904	220	1.5	90	226	0.14	0.52	240
MT-51905	MT-51906	330	1.0	100	316	0.17	0.78	165
MT-51907	MT-51908	470	0.90	120	480	0.21	1.26	190
MT-51909	MT-51910	680	0.85	175	690	0.25	1.50	245
MT-51911	MT-51912	820	0.75	175	780	0.27	2.40	230
MT-51913	MT-51914	1000	0.50	175	975	0.30	2.60	125

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

MT-51900 SERIES

# MT-52200 SERIES

## High Current Toroidal Inductors

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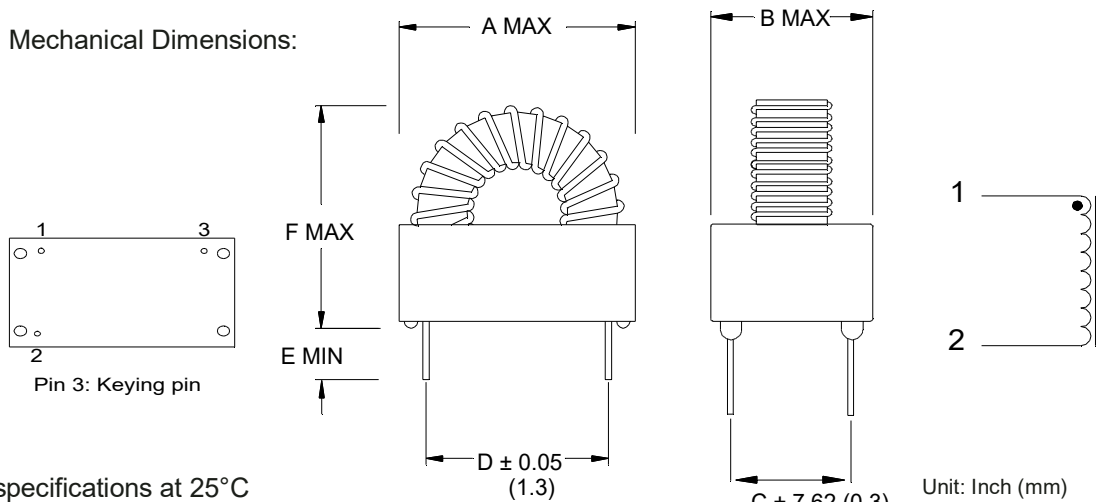
MT-52200 SERIES



- 130°C Max operating temperature
- Low profile horizontal package or baseless version option available

Size Code	1	2	3	4	5	6
A	1.2 (30.48)	1.44 (36.57)	1.6 (40.64)	1.95 (49.53)	2.3 (58.42)	1.3 (33.02)
B	0.6 (15.24)	0.8 (20.32)	0.8 (20.32)	0.9 (23.11)	1.11 (28.19)	0.9 (22.86)
C	0.4 (10.16)	0.6 (15.24)	0.6 (15.24)	0.7 (17.78)	0.9 (22.85)	0.7 (16.76)
D	0.8 (20.32)	0.9 (22.86)	0.9 (22.86)	1.2 (30.48)	1.5 (38.10)	0.75 (19.05)
E	0.2 (5.08)	0.2 (5.08)	0.2 (5.08)	0.2 (5.08)	0.2 (5.08)	0.1 (2.54)
F	1.2 (30.48)	1.44 (36.57)	1.72 (43.68)	2.0 (50.80)	2.3 (58.42)	1.4 (35.56)

Mechanical Dimensions:



Electrical specifications at 25°C

Unit: Inch (mm)

Part Number	Reference Operating Values				Design Control Values					
	Inductance Typical (uH)	IDC (Amps)	ETop(V·us)		Inductance No DC (uH±20%)	50 kHz Test Volts No DC	DCR (mΩ max)	Size Code	Lead Dia Inch (mm)	Min Energy Storage (uJ)
			20KHz	40KHz						
MT-52201	17	17.0	190	130	40.0	0.14	6.5	3	0.079 (2)	2460
MT-52202	32	16.0	290	200	70.7	0.27	9.2	4	0.079 (2)	4100
MT-52203	60	16.0	390	270	120.0	0.47	12	5	0.079 (2)	7700
MT-52204	14	10.0	135	95	28.5	0.073	9	1	0.057 (1.45)	700
MT-52205	23	11.0	170	120	43.5	0.13	12	2	0.057 (1.45)	1400
MT-52206	43	10.0	280	195	85.5	0.21	18	3	0.057 (1.45)	2150
MT-52207	90	10.0	430	300	158.0	0.42	28	4	0.057 (1.45)	4500
MT-52208	144	10.0	570	400	262.0	0.70	32	5	0.057 (1.45)	7200
MT-52209	32	6.6	200	140	60.5	0.11	25	1	0.039 (1)	700
MT-52210	52	7.0	230	160	92.0	0.19	32	2	0.039 (1)	1275
MT-52211	98	6.0	400	280	188.0	0.31	48	3	0.039 (1)	1765
MT-52212	175	6.0	620	425	315.0	0.56	68	4	0.039 (1)	3150
MT-52213	335	6.0	840	580	571.0	1.00	95	5	0.039 (1)	6030
MT-52214	280	3.5	500	350	325.0	0.06	200	6	0.051 (1.3)	1715
MT-52215	470	3.5	600	420	1000.0	1.00	130	3	0.035 (0.9)	2630
MT-52216	400	3.6	600	420	688.0	0.64	130	3	0.035 (0.9)	2700

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# MT-52300 SERIES

# MINNTRONIX

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AC Line Filters EMI / RFI Common Mode Chokes (9.8 Type)



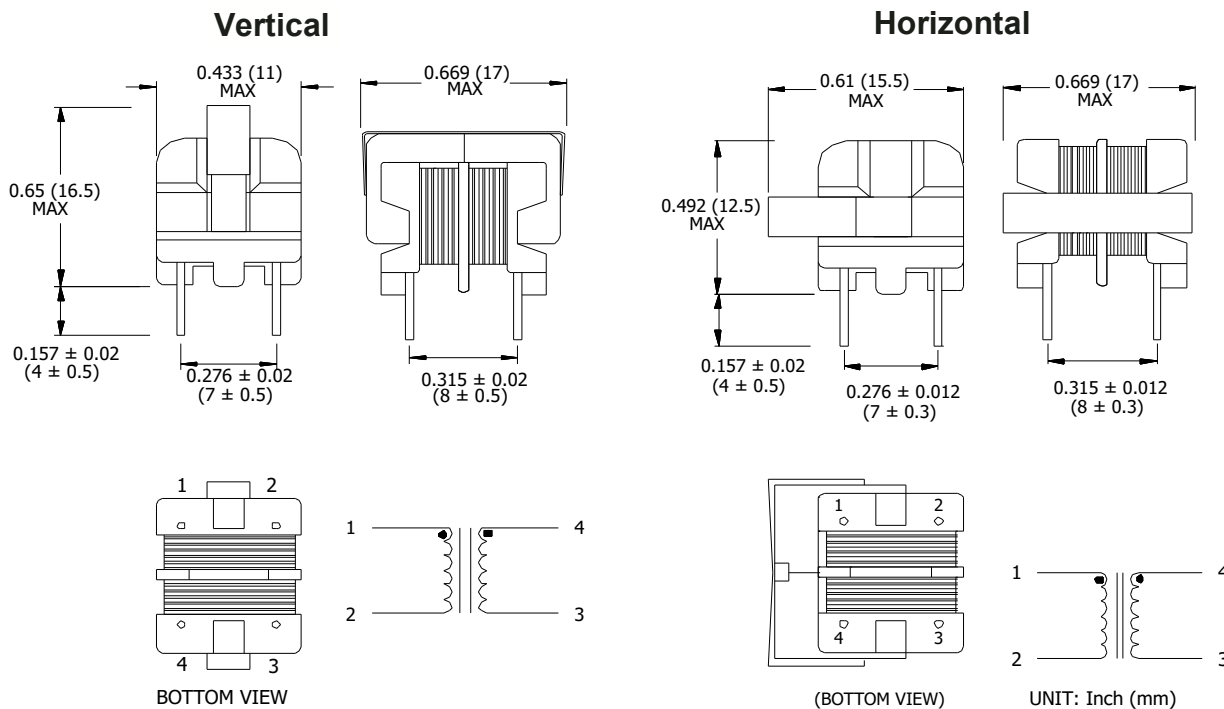
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- Reduces electromagnetic interference (EMI) and radio frequency interference (RFI)
- Protects AC mains from the effects of switching regulators
- Wide inductance range and current ratings available

MT-52300 SERIES

Mechanical Dimensions:



Vertical Part No	Horizontal Part No	Inductance (mH min)	DCR (Ω max)	Rated Current Iac (A)
MT-52301	MT-52321	10	8.0	0.1
MT-52302	MT-52322	8	6.0	0.2
MT-52303	MT-52323	5	3.0	0.3
MT-52304	MT-52324	2	1.0	0.5
MT-52305	MT-52325	1	0.6	0.7
MT-52306	MT-52326	0.5	0.3	1.0

1. Inductance tested at 10kHz, 0.1Vrms
2. Rated voltage: 250 VAC/VDC
3. Withstanding voltage: 2000VAC (one minute between lines)
4. Insulation resistance at 500VDC more than 100M Ω (between lines)
5. Electrical specifications at 25°C

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

# MT-52300A SERIES

AC Line Filters EMI / RFI Common Mode Chokes (SMD Type)

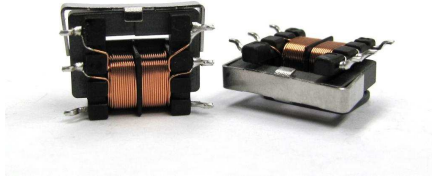
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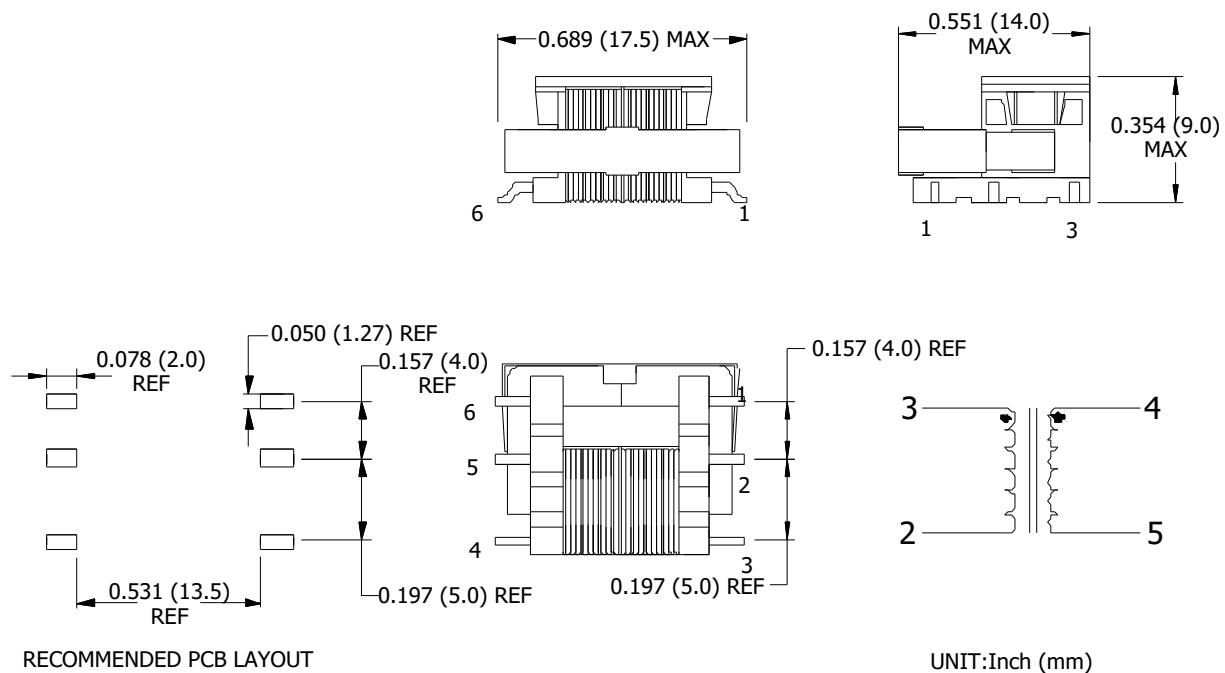
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MT-52300A SERIES



- Reduces electromagnetic interference (EMI) and radio frequency interference (RFI)
- Protects AC mains side from effects of switching regulators
- Wide inductance range and current ratings

Mechanical Dimensions:



Electrical Specifications at 25°C

Part Number	Inductance (mH min)	DCR (Ω max)	Rated Current Iac(A)
MT-52301A	10	8.0	0.1
MT-52302A	8	6.0	0.2
MT-52303A	5	3.0	0.3
MT-52304A	2	1.0	0.5
MT-52305A	1	0.6	0.7
MT-52306A	0.5	0.3	1.0

1. Inductance tested at 10kHz, 0.1 Vrms
2. Rated Voltage: 250VAC/VDC
3. Withstanding voltage: 1500VAC winding to winding
4. Insulation Resistance: at 500VDC, more than 100MΩ
5. Operating temperature: -25°C to +125°C

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.



# MT-52400 SERIES

# MINNTRONIX

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AC Line Filters EMI / RFI Common Mode Chokes (10.5 Type)



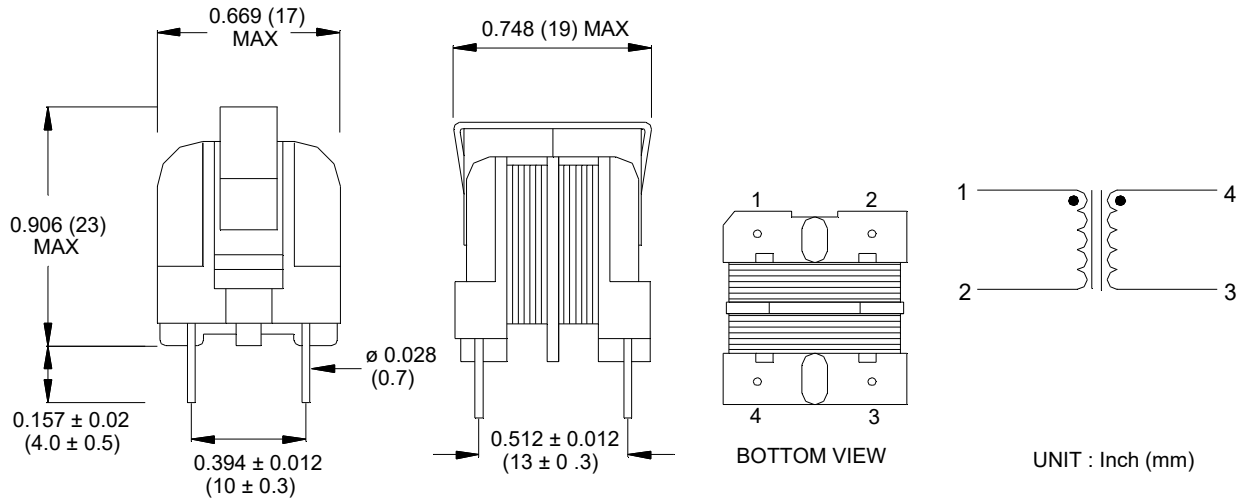
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- Reduces electromagnetic interference (EMI) and radio frequency interference (RFI)
- Protects AC mains from the effects of switching regulators
- Wide inductance range and current ratings available

MT-52400 SERIES

### Mechanical Dimensions:



### Electrical specifications at 25°C

Part Number	Inductance (mH min)	DCR (Ω max)	Rated Current Iac (A)
MT-52401	10	3.0	0.3
MT-52402	5	1.5	0.5
MT-52403	4	1.0	0.7
MT-52404	3	0.5	1.0
MT-52405	2	0.5	1.0
MT-52406	1	0.3	1.3
MT-52407	0.6	0.15	2.0

1. Inductance tested at 10kHz, 0.1Vrms
2. Rated voltage: 250VAC/VDC
3. Withstanding voltage: 2000VAC (one minute between lines)
4. Insulation resistance at 500VDC more than 100M Ω (between lines)
5. Electrical specifications at 25°C

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

# MT-52500 SERIES

AC Line Filters EMI / RFI Common Mode Chokes (15.7 Type)

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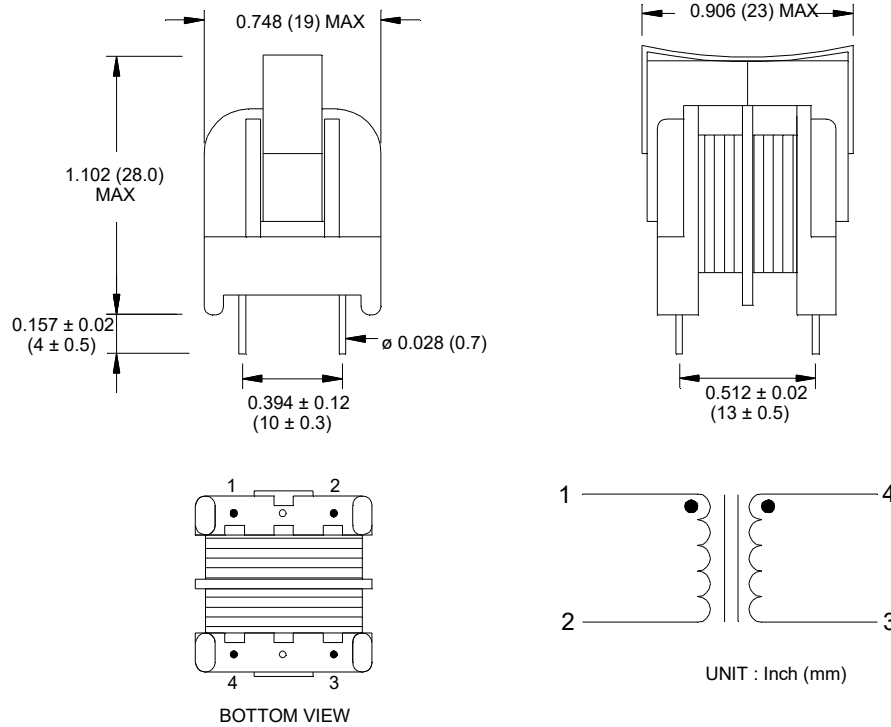
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MT-52500 SERIES



- Reduces electromagnetic interference (EMI) and radio frequency interference (RFI)
- Protects AC mains from the effects of switching regulators
- Wide inductance range and current ratings available

Mechanical Dimensions:



Part Number	Inductance (mH min)	DCR (Ω max)	Rated Current Iac (A)
MT-52501	30	2.8	0.4
MT-52502	20	1.6	0.5
MT-52503	10	1.2	0.6
MT-52504	8	0.8	0.8
MT-52505	6	0.5	1.0
MT-52506	4	0.4	1.0
MT-52507	3.5	0.3	1.2
MT-52508	1.5	0.15	1.5

1. Inductance tested at 10kHz 0.1Vrms
2. Rated voltage: 250VAC/VDC
3. Withstanding voltage: 2000VAC (one minute between lines)
4. Insulation resistance at 500VDC more than 100M Ω (between lines)
5. Electrical specifications at 25°C

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

# MT-52600 SERIES

## Surface Mount Common Mode Chokes

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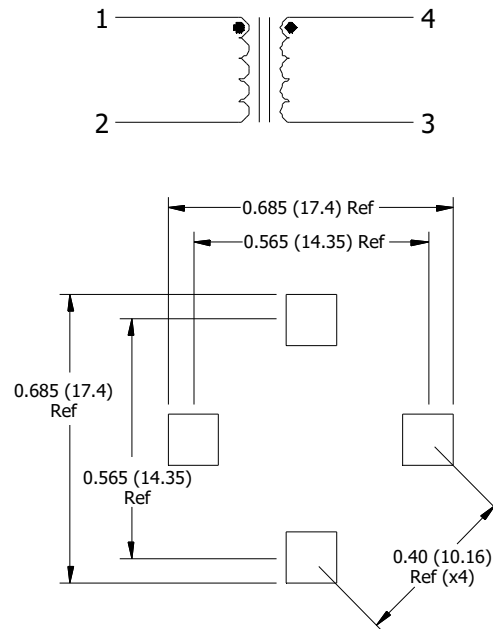
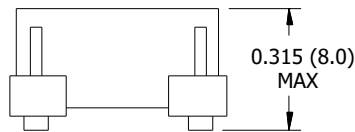
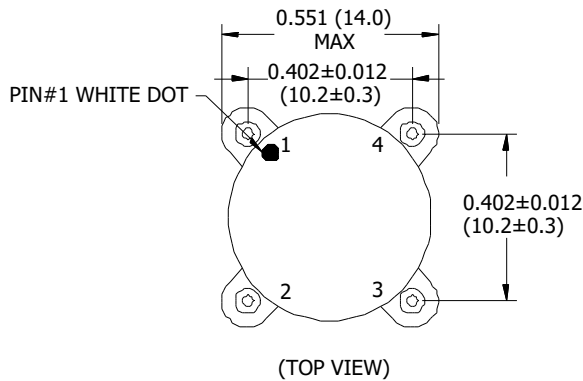


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- Flat top, SMD with excellent terminal coplanarity
- Operating temperature range 0°C to +105°C
- Withstanding voltage: 500Vac
- Maximum power dissipation at 25°C is 0.605 watts

Mechanical Dimensions:



RECOMMENDED PCB LAYOUT

UNIT: Inch (mm)

### Electrical Specifications at 25°C

Part Number	Inductance <sup>1,2</sup> +35% / -30%µH	DCR <sup>1</sup> (Ω max)	Current Rating <sup>3</sup> (Arms max)	Leakage Inductance <sup>4</sup> (µH Typ.)
MT-52601	100	0.006	7.00	0.7
MT-52602	150	0.010	5.50	1.0
MT-52603	220	0.012	5.00	1.4
MT-52604	330	0.017	4.00	1.8
MT-52605	500	0.024	3.30	2.2
MT-52606	750	0.035	2.70	3.0
MT-52607	1000	0.049	2.20	4.0
MT-52608	1200	0.068	1.70	5.0
MT-52609	1800	0.106	1.40	5.5
MT-52610	2200	0.150	1.10	7.0
MT-52611	3300	0.210	0.85	9.5
MT-52612	5000	0.320	0.70	14.0
MT-52613	7500	0.640	0.44	22.0
MT-52614	10000	0.900	0.33	29.0

1. Inductance and DCR in table is for either L1 or L2
2. Inductance tested at 10kHz
3. ΔT = 40°C rise typ. at rated current
4. Leakage Inductance tested at L1 with L2 shorted or at L2 with L1 shorted

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

MT-52600 SERIES

# MT-52800 SERIES

# MINNTRONIX

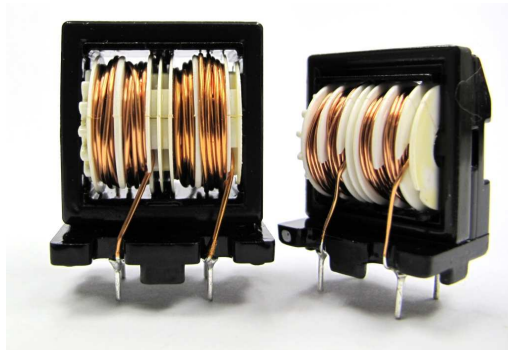
Wind Up the Best®

## High Peak Impedance Common Mode Chokes



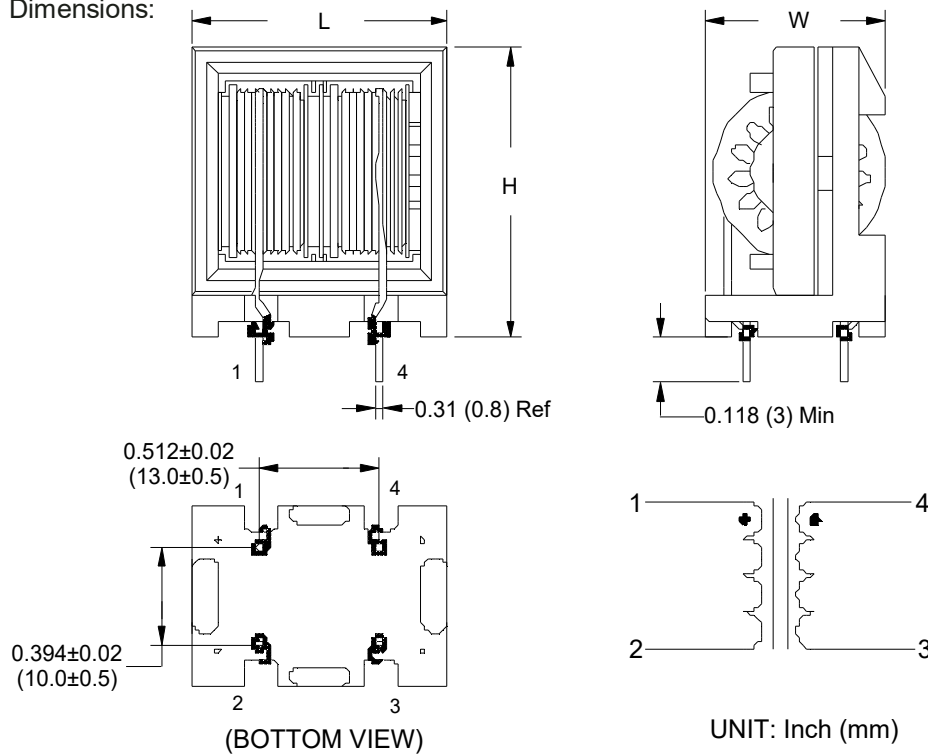
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MT-52800 SERIES



- High peak impedance for high frequency range noise suppression
- This series employs two outer magnetic path limbs with windings on the center limb core to reduce leakage flux
- Wide range of available inductances and current ratings
- Fits standard CMC footprint
- Cost-effective construction

Mechanical Dimensions:



Electrical Specifications at 25°C

Part Number	Inductance (mH min)	DCR (mΩ max) @ 20°C	Rated Current Iac(A)	Dimensions Inch (mm) max		
				L	W	H
MT-52801	25	650	1.0	1.20 (30.5)	0.886 (22.5)	1.40 (35.5)
MT-52802	16	350	1.5	1.20 (30.5)	0.886 (22.5)	1.40 (35.5)
MT-52803	8	220	2.0	1.20 (30.5)	0.886 (22.5)	1.40 (35.5)
MT-52804	5.6	160	2.5	1.20 (30.5)	0.886 (22.5)	1.40 (35.5)
MT-52805	15	590	1.0	1.00 (25.5)	0.728 (18.5)	1.20 (30.5)
MT-52806	7	270	1.5	1.00 (25.5)	0.728 (18.5)	1.20 (30.5)
MT-52807	3	130	2.0	1.00 (25.5)	0.728 (18.5)	1.20 (30.5)
MT-52808	2	95	2.5	1.00 (25.5)	0.728 (18.5)	1.20 (30.5)

1. Inductance tested at 10kHz, 0.5mA
2. Rated voltage: 250VAC/VDC
3. Withstanding voltage: 2000VAC (one minute, between lines)
4. Insulation resistance: at 500VDC, more than 100MΩ (between lines)

# MT-52900 SERIES

# MINNTRONIX

Wind Up the Best®

## Common Mode Chokes for Three-Phase Power



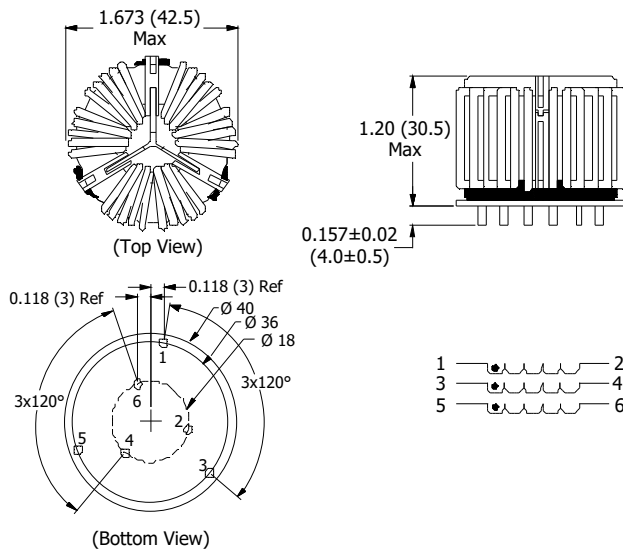
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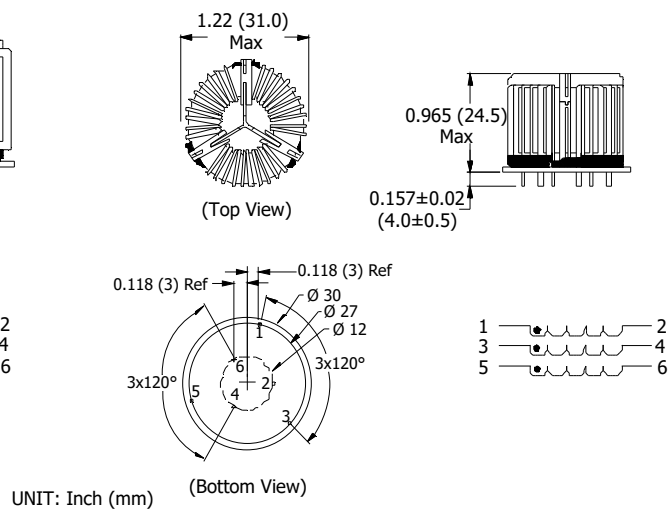
- High inductance with a low number of turns
- Low DCR
- Winding to winding isolation 3000 Vrms for 1 sec
- Turn ratio 1:1:1

### Mechanical Dimensions:

#### Type A



#### Type B



UNIT: Inch (mm)

### Electrical Specifications at 25°C

Part Number	Inductance (mH min)	DCR (mΩ max)	Rated Current Iac (A)	Wire Size (mm)	Type
MT-52901	2.0	11.0	5.0	1.0	B
MT-52902	2.6	15.0	4.0	0.9	B
MT-52903	3.3	21.0	3.0	0.8	B
MT-52904	5.0	7.0	10.0	1.6	A
MT-52905	8.4	14.0	8.0	1.3	A
MT-52906	12.7	28.0	6.0	1.1	A

1. Inductance tested at 10kHz, 0.1 Vrms.
2. Operating temperature range -40°C to +130°C

# MTF-260X SMT SERIES

# MINNTRONIX

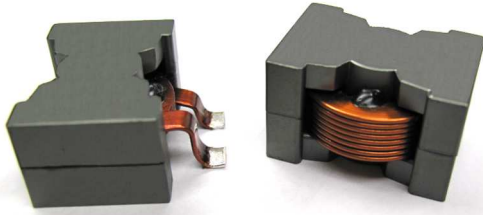
Wind Up the Best®

## High Current Flat-Wire Inductors



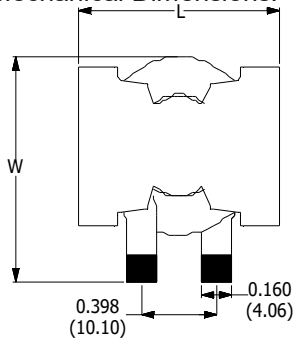
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MTF-260X SMT SERIES

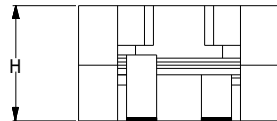


- Flat helical wound coil
- Designed for high current, high volt-time applications
- Low DCR, lower loss, reduced size, high efficiency, less temperature rise
- 500Vrms winding to core isolation

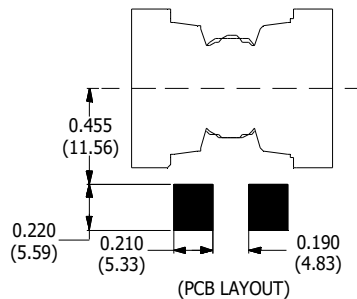
### Mechanical Dimensions:



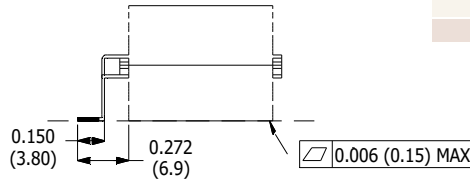
(TOP VIEW)



UNIT: Inch (mm)



(PCB LAYOUT)



### MTF-260X-XXX

Inductance Value

Dimensions Size

Type Size Inch (mm)	2603	2604	2605
L Max	1.10 (27.94)	1.10 (27.94)	1.10 (27.94)
W Max	1.10 (27.94)	1.10 (27.94)	1.10 (27.94)
H Max	0.563 (14.3)	0.563 (14.3)	0.657 (16.7)

### Electrical Specifications at 25°C

Part Number	Inductance <sup>1,2</sup> (uH)	DCR (mΩ) max	SRF (MHz) typ	I sat (A) <sup>3</sup>		
				10% drop	20% drop	30% drop
MTF-2603-1R5	1.5	1.62	60	80	>100	>100
MTF-2603-2R2	2.2	1.62	50	65.0	75.0	80
MTF-2603-3R3	3.3	1.62	40	48.0	54.0	57.0
MTF-2603-4R7	4.7	1.62	30	33.0	36.9	39.0
MTF-2603-6R8	6.8	1.62	25	22.0	26.0	27.8
MTF-2603-100	10	1.62	20	13.0	16.2	17.6
MTF-2603-150	15	1.62	15	7.5	9.8	11.0
MTF-2603-220	22	1.62	10	4.5	6.0	6.8
MTF-2603-330	33	1.62	7	2.0	2.6	3.3
MTF-2604-2R2	2.2	2.01	40	78	88	94
MTF-2604-3R3	3.3	2.01	30	62.0	66.9	68.4
MTF-2604-4R7	4.7	2.01	25	42.0	48.0	50.1
MTF-2604-6R8	6.8	2.01	20	30.0	34.5	36.2
MTF-2604-100	10	2.01	15	18.0	21.5	23.4
MTF-2604-150	15	2.01	12	11.5	14.0	15.2
MTF-2604-220	22	2.01	10	7.0	8.6	9.6
MTF-2604-330	33	2.01	18	4.0	5.1	5.9
MTF-2605-3R3	3.3	2.82	40	76.0	83	90
MTF-2605-4R7	4.7	2.82	30	59.0	61.2	62.4
MTF-2605-6R8	6.8	2.82	25	42.0	45.0	45.9
MTF-2605-100	10	2.82	20	28.0	31.2	32.1
MTF-2605-150	15	2.82	16	18.0	21.2	21.9
MTF-2605-220	22	2.82	15	12.0	14.0	15.0
MTF-2605-330	33	2.82	10	7.0	8.7	9.6

1. Inductance tested at 500kHz, 0.1Vrms
2. Inductance tolerance ± 10%
3. DC current at which the inductance drops by percentages listed from its no-DC value
4. Winding temperature rise = 130°C Max
5. Operating temperature range -25°C to +100°C

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

# MTF-420XX SERIES

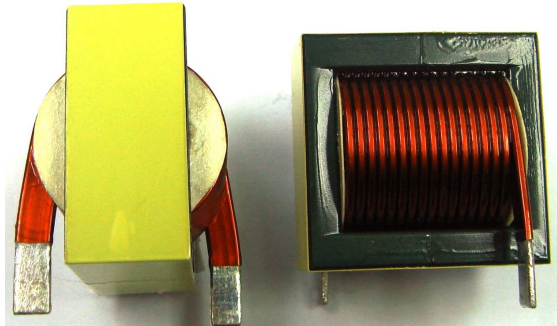
# MINNTRONIX

Wind Up the Best®

## Flat Helix Winding Coils



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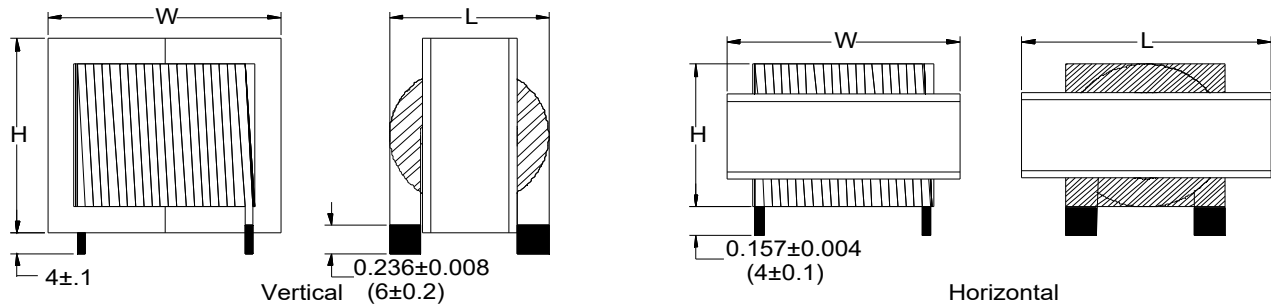


- Designed for high current, high volt•time applications
- Low DCR, low loss, reduced size, high efficiency, less temperature rise
- Winding to core isolation is 500 Vrms

### MTF-4201X-420

Inductance Value  
 Version (V) Vertical or (H) Horizontal  
 Dimensions Size

Mechanical Dimensions:



Unit: Inch (mm)

Size (Typ)	4201		4202		4203	
	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal
L inch (mm)	1.26 (32.0)	1.69 (42.93)	1.26 (32.0)	1.69 (42.93)	1.26 (32.0)	1.69 (42.93)
W inch (mm)	1.06 (26.92)	1.06 (26.92)	1.38 (35.05)	1.38 (35.05)	1.69 (42.93)	1.69 (42.93)
H inch (mm)	1.69 (42.93)	1.26 (32.0)	1.69 (42.93)	1.26 (32.0)	1.69 (42.93)	1.26 (32.0)

### Electrical Specifications at 25°C

Part Number	Inductance <sup>1,2</sup> (uH)		Isat <sup>3</sup> (Adc)	DCR (mΩ) Max @ 20°C	Mounting Holes Pattern (mm)
	@ 0 ADC	@ Isat			
MTF-4201X-420	48	42	20	5.4	1.5 x 7.5
MTF-4201X-300	32	30	25	3.3	1.7 x 7.5
MTF-4201X-110	15	11	39	1.5	2.3 x 7.5
MTF-4201X-5R5	9.0	5.5	52	0.9	2.7 x 7.5
MTF-4202X-770	80	77	16	9.0	1.5 x 7.5
MTF-4202X-520	55	52	20	5.9	1.7 x 7.5
MTF-4202X-190	22	19	33	2.3	2.3 x 7.5
MTF-4202X-130	16	13	40	1.5	2.7 x 7.5
MTF-4203X-261	260	255	6.5	18	1.5 x 7.5
MTF-4203X-201	200	200	10	10.5	1.5 x 7.5
MTF-4203X-340	38	34	26	3.5	2.3 x 6.5
MTF-4203X-500	55	50	30	5.0	1.9 x 6.5
MTF-4203X-4R0	6.5	4.0	75	0.5	4.5 x 7.5

1. Inductance tested at 100kHz, 0.1 Vrms
2. Inductance tolerance ± 20%
3. Inductance drop = 20% typ. At rated Isat.
4. Δ T = 130°C rise typ.
5. Operating temperature range -25°C to +100°C

Specifications subject to change. Custom versions of any Minntronix Products are available upon request.

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